

Flight-Testing Newton's Laws			
2000 Science, Math, and Technology			
Framework of Standards			
Vermont Science, Math, and Technology			
Grades 9-12			
Activity/Lesson	State	Standards	
Session-10 (1-5)	VT	SMT.9-12.7.8.7.8.ccc3	Define and use variables, parameters, constants, and unknowns in work with both functions and equations; solve equations both symbolically and graphically, especially linear, quadratic, and exponential equations; use equations to represent curves such as circles, ellipses, parabolas, and hyperbolas;
Session-10 (1-5)	VT	SMT.9-12.7.12.7.12.dd d4	Use Newton's laws to explain quantitatively the effects of applied forces; observe, explain, and model object motion in a plane; qualitatively investigate conservation of momentum as it relates to collisions, and investigate the mechanics of rolling motion;
Session-1 (1-17)	VT	SMT.9-12.7.8.7.8.ccc3	Define and use variables, parameters, constants, and unknowns in work with both functions and equations; solve equations both symbolically and graphically, especially linear, quadratic, and exponential equations; use equations to represent curves such as circles, ellipses, parabolas, and hyperbolas;
Session-1 (1-17)	VT	SMT.9-12.7.12.7.12.dd d4	Use Newton's laws to explain quantitatively the effects of applied forces; observe, explain, and model object motion in a plane; qualitatively investigate conservation of momentum as it relates to collisions, and investigate the mechanics of rolling motion;
Session-2 (1-10)	VT	SMT.9-12.7.8.7.8.ccc3	Define and use variables, parameters, constants, and unknowns in work with both functions and equations; solve equations both symbolically and graphically, especially linear, quadratic, and exponential equations; use equations to represent curves such as circles, ellipses, parabolas, and hyperbolas;
Session-2 (1-10)	VT	SMT.9-12.7.12.7.12.dd d4	Use Newton's laws to explain quantitatively the effects of applied forces; observe, explain, and model object motion in a plane; qualitatively investigate conservation of momentum as it relates to collisions, and investigate the mechanics of rolling motion;
Session-3 (1-6)	VT	SMT.9-12.7.8.7.8.ccc3	Define and use variables, parameters, constants, and unknowns in work with both functions and equations; solve equations both symbolically and graphically, especially linear, quadratic, and exponential equations; use equations to represent curves such as circles, ellipses, parabolas, and hyperbolas;

Session-3 (1-6)	VT	SMT.9-12.7.12.7.12.dd d4	Use Newton's laws to explain quantitatively the effects of applied forces; observe, explain, and model object motion in a plane; qualitatively investigate conservation of momentum as it relates to collisions, and investigate the mechanics of rolling motion;
Session-4 (1-11)	VT	SMT.9-12.7.8.7.8.ccc3	Define and use variables, parameters, constants, and unknowns in work with both functions and equations; solve equations both symbolically and graphically, especially linear, quadratic, and exponential equations; use equations to represent curves such as circles, ellipses, parabolas, and hyperbolas;
Session-4 (1-11)	VT	SMT.9-12.7.12.7.12.dd d4	Use Newton's laws to explain quantitatively the effects of applied forces; observe, explain, and model object motion in a plane; qualitatively investigate conservation of momentum as it relates to collisions, and investigate the mechanics of rolling motion;
Session-5 (1-6)	VT	SMT.9-12.7.8.7.8.ccc3	Define and use variables, parameters, constants, and unknowns in work with both functions and equations; solve equations both symbolically and graphically, especially linear, quadratic, and exponential equations; use equations to represent curves such as circles, ellipses, parabolas, and hyperbolas;
Session-5 (1-6)	VT	SMT.9-12.7.12.7.12.dd d4	Use Newton's laws to explain quantitatively the effects of applied forces; observe, explain, and model object motion in a plane; qualitatively investigate conservation of momentum as it relates to collisions, and investigate the mechanics of rolling motion;
Session-6 (1-8)	VT	SMT.9-12.7.8.7.8.ccc3	Define and use variables, parameters, constants, and unknowns in work with both functions and equations; solve equations both symbolically and graphically, especially linear, quadratic, and exponential equations; use equations to represent curves such as circles, ellipses, parabolas, and hyperbolas;
Session-6 (1-8)	VT	SMT.9-12.7.12.7.12.dd d4	Use Newton's laws to explain quantitatively the effects of applied forces; observe, explain, and model object motion in a plane; qualitatively investigate conservation of momentum as it relates to collisions, and investigate the mechanics of rolling motion;
Session-7 (1-5)	VT	SMT.9-12.7.8.7.8.ccc3	Define and use variables, parameters, constants, and unknowns in work with both functions and equations; solve equations both symbolically and graphically, especially linear, quadratic, and exponential equations; use equations to represent curves such as circles, ellipses, parabolas, and hyperbolas;

Session-7 (1-5)	VT	SMT.9-12.7.12.7.12.dd d4	Use Newton's laws to explain quantitatively the effects of applied forces; observe, explain, and model object motion in a plane; qualitatively investigate conservation of momentum as it relates to collisions, and investigate the mechanics of rolling motion;
Session-8 (1-9)	VT	SMT.9-12.7.8.7.8.ccc3	Define and use variables, parameters, constants, and unknowns in work with both functions and equations; solve equations both symbolically and graphically, especially linear, quadratic, and exponential equations; use equations to represent curves such as circles, ellipses, parabolas, and hyperbolas;
Session-8 (1-9)	VT	SMT.9-12.7.12.7.12.dd d4	Use Newton's laws to explain quantitatively the effects of applied forces; observe, explain, and model object motion in a plane; qualitatively investigate conservation of momentum as it relates to collisions, and investigate the mechanics of rolling motion;
Session-9 (1-7)	VT	SMT.9-12.7.8.7.8.ccc3	Define and use variables, parameters, constants, and unknowns in work with both functions and equations; solve equations both symbolically and graphically, especially linear, quadratic, and exponential equations; use equations to represent curves such as circles, ellipses, parabolas, and hyperbolas;
Session-9 (1-7)	VT	SMT.9-12.7.12.7.12.dd d4	Use Newton's laws to explain quantitatively the effects of applied forces; observe, explain, and model object motion in a plane; qualitatively investigate conservation of momentum as it relates to collisions, and investigate the mechanics of rolling motion;